

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Item #15 (Rev. 1)

Agenda ID 13571

RESOLUTION E-4701

January 15, 2015

ENERGY DIVISION

R E D A C T E D
R E S O L U T I O N

Resolution E-4701. Pacific Gas and Electric Company requests approval of a fourth amendment to a power purchase agreement between CalRENEW-1, LLC and Pacific Gas and Electric Company.

PROPOSED OUTCOME:

- This Resolution approves cost recovery for the fourth amendment to the power purchase agreement between Pacific Gas and Electric Company and CalRENEW-1, LLC.

SAFETY CONSIDERATIONS:

- The fourth amendment to the CalRENEW-1 power purchase agreement between Pacific Gas and Electric Company and CalRENEW-1, LLC does not appear to result in any adverse safety impacts on the facilities or operations of Pacific Gas and Electric Company.

ESTIMATED COST:

- Costs of the power purchase agreement, as amended by the fourth amendment, will continue to be priced at \$179/MWh before adjustments by time-of-delivery factors.¹

By Advice Letter 4473-E filed on August 8, 2014.

¹ The CalRENEW-1 facility has been online since August 10, 2009. Pursuant to D.06-06-066 (as modified by D.08-04-023) all contract pricing information is public three years after the facility achieves commercial operation.

SUMMARY

Pacific Gas and Electric Company's renewable energy power purchase agreement, as amended, with CalRENEW-1 LLC complies with the Renewables Portfolio Standard procurement guidelines and is approved without modification.

Pacific Gas and Electric Company (PG&E) filed Advice Letter(AL) 4473-E on August 8, 2014, requesting California Public Utilities Commission (Commission) review and approval of a renewable energy power purchase agreement (PPA), as amended by a fourth amendment, between PG&E and CalRENEW-1, LLC.² The fourth amendment modifies contract terms and conditions and will allow the agreement between PG&E and CalRENEW-1 to remain in effect, but without changes to the project capacity, expected generation, or contract price. PG&E's request is granted without modification.

Generating Facilities	Technology Type	Term (Years)	Capacity (MW)	Energy (GWh/year)	Online Date	Location
CalRENEW-1	Solar PV	20	5	9 GWh	8/10/2009	Mendota, CA

BACKGROUND

Overview of the Renewables Portfolio Standard Program

The California Renewables Portfolio Standard(RPS) Program was established by Senate Bill (SB) 1078, and has been subsequently modified by SB 107, SB 1036 and SB 2 (1X).³ The RPS program is codified in Pub. Util. Code Sections 399.11-399.20.⁴

² The original contract, was filed in AL 3074-E and subsequently amended by AL 3074-E-A, AL 3074-E-B, AL 3260-E and was approved in Resolution E-4203 on November 6, 2008.

³ SB 1078 (Sher, Chapter 516, Statutes of 2002); SB 107 (Simitian, Chapter 464, Statutes of 2006); SB 1036 (Perata, Chapter 685, Statutes of 2007); SB 2 (1X) (Simitian, Chapter 1, Statutes of 2011, First Extraordinary Session).

⁴ All further references to sections refer to Public Utilities Code unless otherwise specified.

Under SB 2 (1X),⁵ the RPS program administered by the Commission requires each retail seller to increase its total procurement of eligible renewable energy resources so that the amount of electricity generated per year from eligible renewable resources be increased to an amount that equals an average of 20% of the total electricity sold to retail customers in California for the period 2011-2013; 25% of retail sales by December 31, 2016; and 33% of retail sales by December 31, 2020.⁶

Additional background information about the Commission's RPS Program, including links to relevant laws and Commission decisions, is available at <http://www.cpuc.ca.gov/PUC/energy/Renewables/overview.htm> and <http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>.

NOTICE

Notice of AL 4473-E was made by publication in the Commission's Daily Calendar. PG&E states that copies of the AL were mailed and distributed in accordance with Section IV of General Order 96-B.

PROTESTS

PG&E AL 4473-E was not protested.

DISCUSSION

Pacific Gas & Electric Company requests approval of a renewable energy power purchase agreement, as amended by a fourth amendment, with CalRENEW-1 LLC.

The CalRENEW-1 PPA originally resulted from PG&E's 2006 RPS Solicitation. On June 27, 2007, PG&E filed the original CalRENEW-1 PPA for Commission approval via AL 3074-E. On October 9, 2007, PG&E submitted the first amendment the original CalRENEW-1 PPA that amended the project's location.⁷ PG&E filed a

⁵ SB 2 (1X) becomes effective on December 10, 2011; 90 days after the close of the Legislatures 2011 Extraordinary Session.

⁶ See SB 2 (1X) § 399.15(b)(2)(B).

⁷ The first amendment to the CalRENEW-1 PPA was submitted via AL 3074-E-A.

second amendment to the amended CalRENEW-1 PPA on November 29, 2007, that amended the non-modifiable standard terms and conditions (STCs) to adhere to orders of CPUC Decision (D.) 07-11-025.⁸ The Commission approved the CalRENEW-1 PPA, as amended by the first and second amendments, on December 20, 2007, via Resolution E-4132.

On April 30, 2008, PG&E filed a third amendment to the CalRENEW-1 PPA through AL 3260-E. The third amendment to the CalRENEW-1 PPA provided an extension to the no-fault termination right related to federal legislation extending the 30 percent Energy Tax Credit.⁹ PG&E and CalRENEW-1 also agreed in the third amendment to extend certain project milestones.¹⁰ The Commission approved the third amendment to the PPA on November 6, 2008 in Resolution E-4203.

In Q3 2013 CalRENEW initiated bilateral negotiations with PG&E to amend the amended CalRENEW-1 PPA in response to the CAISO's implementation of Federal Energy Regulatory Commission(FERC) Order 764.¹¹ PG&E and CalRENEW-1 agreed to amend and, for purposes of clarity, to restate the terms of the agreement. The resulting amended and restated PPA was executed on June 17, 2014.

The fourth amendment to the CalRENEW-1 PPA ensures the ability of the CalRENEW-1 facility to schedule RPS eligible generation into the CAISO at

⁸ The second amendment to the CalRENEW-1 PPA was submitted via AL 3074-E-B.

⁹ In the U.S. tax code, the Energy Tax Credit is a 30 percent tax credit for solar systems on residential (under Section 25D) and commercial (under Section 48) properties.

¹⁰ The failure of the federal government to enact Energy Tax Credit Legislation could have impact CalRENEW's ability to achieve the Construction Start Date and the Guaranteed Commercial Operation date in the PPA. Therefore, PG&E and CALRENEW agreed in the Third Amendment to extend the Guaranteed Construction Start Date and the Guaranteed Commercial l Operation date by one year.

¹¹ FERC Order No. 764, issued in June of 2012, was designed to address the increase in variable energy resources being brought online and to remove barriers for variable energy resources integration. Specifically, in Order 764, the FERC required transmission providers to give customers the option of adjusting their transmission schedules at 15-minute intervals.

15-minute intervals and, consequently, continue participation in the evolving CAISO marketplace. Additionally, the fourth amendment to the CalRENEW-1 PPA gives PG&E increased operational flexibility through curtailment rights and delegates PG&E the responsibility to serve as the scheduling coordinator (SC) for the CalRENEW-1 facility.

Additional terms and conditions of the Amended and Restated PPA are described in Confidential Appendix A.

PG&E requests that the Commission issue a resolution that:

1. Finds that entry into the Amended and Restated PPA is reasonable;
2. Approves the Amended and Restated PPA in its entirety, including payments to be made by PG&E pursuant to the Amended and Restated PPA, subject to the Commission's review of PG&E's administration of the Amended and Restated PPA.
3. Finds that the Amended and Restated PPA has no effect upon the RPS eligibility of the Project.
4. Adopts a finding of fact and conclusion of law that deliveries from the Amended and Restated PPA shall be categorized as grandfathered pursuant to California Public Utilities Code Section 399.16(d), subject to the Commission's after-the-fact verification that all applicable criteria have been met.

Energy Division evaluated the CalRENEW-1 PPA, as amended by the proposed fourth amendment, on the following criteria:

- RPS procurement portfolio need;
- Price reasonableness and value;
- Contract amendment reasonableness and value;
- Consistency with RPS standard terms and conditions;
- Consistency with portfolio content categories requirements;
- Compliance with the interim greenhouse gas emissions performance standard;
- Independent evaluator review; and

- Project viability assessment and development status.

RPS portfolio need

The California RPS Program was established by Senate Bill (SB) 1078 and has been recently modified by SB 2 (1X), which became effective on December 10, 2011. SB 2 (1X) made significant changes to the RPS Program. SB2 (1X) established new RPS procurement targets such that retail sellers must procure "...from January 1, 2011 to December 31, 2013...an average of 20 percent of retail sales... 25 percent of retail sales by December 31, 2016, and 33 percent of retail sales by December 31, 2020."

The CalRENEW-1 facility has been delivering RPS-eligible generation since 2009 and has contributed to PG&E's compliance with the RPS program. Additionally, the contracted volumes from the CalRENEW-1 facility are already included in PG&E's current Renewable Net Short calculation and have demonstrated alignment with PG&E's future RPS need.

The Commission finds that generation from the CalRENEW-1 facility fits the portfolio need requirements of PG&E's RPS portfolio.

Price reasonableness and value

The Commission reviewed the original CalRENEW-1 PPA on December 20, 2007, and concluded that "PG&E made a sufficient showing the contract price are reasonable."¹² On December 20, 2007, the Commission ordered that the costs of the original CalRENEW-1 PPA are reasonable and are fully recoverable in rates over the life of the project.¹³

¹² California Public Utilities Commission Resolution E-4132, at p.9.

¹³ California Public Utilities Commission Resolution E-4132, at p.27. The costs of the contracts between PG&E and GreenVolts and PG&E and CalRenew are reasonable and in the public interest; accordingly, the payments to be made by PG&E are fully recoverable in rates over the life of the projects, pursuant to SB 1036 and subject to CPUC review of PG&E's administration of the contracts.

Neither of the prior three amendments to the CalRENEW-1 PPA, nor the fourth amendment to the CalRENEW-1 PPA, have modified the original contract price that was approved by the Commission in 2007 for full cost recovery.¹⁴ Consequently, the fourth amendment to the CalRENEW-1 PPA is not being evaluated for price reasonableness or value.

Payments made by PG&E under the CalRENEW-1 PPA fourth amendment are fully recoverable in rates over the life of the amended PPA, subject to Commission review of PG&E's administration of the amended PPA and amendments.

The fourth contract amendment is reasonable

On June 22, 2012, the FERC issued the Integration of Variable Energy Resources Final Rule (FERC Order 764),¹⁵ which requires each public utility transmission provider to offer intra-hourly transmission scheduling at 15-minute intervals and also requires variable energy resources (VER)¹⁶ to provide meteorological and forced outage data to improve energy forecasting.

To implement FERC Order 764, the CAISO developed a tariff amendment proposal to add 15-minute scheduling and a revised end-of-month settlement process on August 15, 2013.¹⁷ This proposal included changes to the Participating Intermittent Resource Program (PIRP)¹⁸ by creating 15-minute schedules for PIRP resources

¹⁴ Deliveries from the CalRENEW-1 project to PG&E will continue to be priced at \$179/MWh before time-of-delivery adjustment.

¹⁵ Integration of Variable Energy Resources, Order No. 764, FERC Stats. & Regs.

¹⁶ Order No. 764 defined a VER as a device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator.

¹⁷ CAISO tariff amendment proposal filed through FERC Docket Number ER 14-495-001.

¹⁸ The CAISO's PIRP initiative focuses on understanding the cost drivers for wind and solar generation resources, and if improving the forecast accuracy can significantly reduce cost impacts. It also includes development of a CAISO tariff filing to address the appropriate charges associated with the export of Energy from Participating Intermittent Resources Program resources.

based on forecasts made 37.5 minutes prior to the scheduled interval. Additionally, the CAISO proposal recommended eliminating the prior practice of netting PIRP imbalance energy on a monthly basis and settling deviations at the monthly average of five-minute prices. On March 20, 2014, the FERC conditionally accepted the CAISO's tariff amendment proposal to comply with FERC Order 764.

The original CalRENEW-1 PPA placed the obligation on both buyer and seller to serve as their own scheduling coordinators or hire a third-party scheduling coordinator, and required the seller to submit schedules to the CAISO. To comply with the CAISO tariff amendment, PG&E is now amending the CalRENEW-1 PPA so that PG&E assumes the role of scheduling coordinator for the CalRENEW-1. As the scheduling coordinator for the CalRENEW-1 facility, PG&E bears the increased risks associated with imbalance costs under the CAISO's tariff amendment. In exchange for assuming the responsibilities and risks of the scheduling coordinator, the amended CalRENEW-1 PPA allows PG&E to curtail generation from the CalRENEW-1 facility. PG&E may only order the CalRENEW-1 facility to curtail its output subject to specific operational constraints that have been agreed to in the amended CalRENEW-1 PPA. Additional information about the curtailment provisions can be found in Confidential Appendix A.

The insertion of contract provisions that allow PG&E to exercise a buyer curtailment option provides ratepayers with a benefit without a change in the original contract price. Specifically, the fourth amendment to the CALRENEW-1 PPA allows PG&E to avoid taking delivery of the project's energy when CAISO market prices turn negative during over-generation episodes, i.e., when ratepayers would otherwise pay for the facility to deliver energy with a negative market price. The CAISO is already experiencing negative-price hours and could experience more as additional intermittent resources are built and come on line in California. The fourth amendment to the CALRENEW-1 PPA would protect ratepayers from bearing additional costs from a product that has negative value.

The Commission finds that the curtailment terms of the CalRENEW-1 PPA, as amended by the fourth amendment, are reasonable and provide ratepayers increased benefits without increasing the cost of the original power purchase agreement.

Consistency with RPS standard terms and conditions

The Commission adopted a set of standard terms and conditions (STCs) required in RPS contracts, four of which are considered “non-modifiable.” The STCs were compiled in D.08-04-009 and subsequently amended in D.08-08-028. More recently in D.10-03-021, as modified by D.11-01-025, and later through D.13-11-024, the Commission refined the STCs.

The CalRENEW-1 PPA, as amended, includes the Commission adopted RPS “non-modifiable” standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, D.10-03-021, as modified by D.11-01-025, and D.13-11-024.

Consistency with portfolio content category requirements

In D.11-12-052, the Commission defined and implemented PCCs for the RPS program and authorized the Director of Energy Division to require the investor-owned utilities to provide information regarding the proposed contract’s PCC classification in each AL seeking Commission approval of an RPS contract. The purpose of the information is to allow the Commission to evaluate the claimed PCC of the proposed RPS PPAs and the risks and value to ratepayers if the proposed PPA ultimately results in renewable energy credits in another PCC.

In AL 4473-E, PG&E asserts that portfolio content categories do not apply to the fourth amendment to the CalRENEW-1 PPA. PG&E argues that the fourth amendment to the CalRENEW-1 PPA is exempt from the D.11-12-052 categorization requirements for post-June 1, 2010 RPS procurement (“Grandfathered Procurement”) because the original CalRENEW-1 PPA was executed prior to June 1, 2010. To support its assertion, PG&E notes that: (i) the renewable energy resource was eligible under the rules in place at the time of execution of the original CalRENEW-1 PPA; (ii) the original CalRENEW-1 PPA was approved by the Commission by Resolution E-4132; and (iii) the fourth amendment to the CalRENEW-1 PPA does not increase the nameplate capacity or expected quantities of annual generation, or substitute a different renewable energy resource.

Consistent with D.11-12-052, PG&E provided information in AL 4473-E regarding the expected portfolio content category classification of the renewable energy credits to be procured pursuant to the amended CalRENEW-1 PPA.

Compliance with the interim greenhouse gas emissions performance standard

California Pub. Util. Code §§ 8340 and 8341 require that the Commission consider emissions costs associated with new long-term (five years or greater) baseload power contracts procured on behalf of California ratepayers.¹⁹

D.07-01-039 adopted an interim EPS that establishes an emission rate for obligated facilities at levels no greater than the greenhouse gas (GHG) emissions of a combined-cycle gas turbine power plant. Generating facilities using certain renewable resources are deemed compliant with the EPS.²⁰

The amended CalRENEW-1 PPA power purchase agreement is not covered procurement subject to the emissions performance standard because the generating facility has a forecast annualized capacity factor of less than 60 percent and therefore are not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the Adopted Interim Emission Performance Standard Rules.

Independent evaluator review

PG&E retained IE Arroyo Seco Consulting to oversee the negotiations for the fourth amendment of the CALRENEW-1 PPA, and to evaluate the overall merits of the PPA for CPUC approval. Arroyo opines that the existing, operating, CalRENEW-1 project ranks very high in project viability and that the negotiations between Meridian Energy and PG&E were handled fairly by the utility with respect to competitors.

Consistent with D.06-05-039, an independent evaluator oversaw PG&E's renewable portfolio standard procurement process. Additionally, an independent evaluator oversaw PG&E's negotiations with CalRENEW-1.

¹⁹ "Baseload generation" is electricity generation at a power plant "designed and intended to provide electricity at an annualized plant capacity factor of at least 60%." Pub. Util. Code § 8340 (a).

²⁰ D.07-01-039, Attachment 7, p. 4.

RPS eligibility and CPUC approval

Pursuant to Pub. Util. Code § 399.13, the CEC certifies eligible renewable energy resources. Generation from a resource that is not CEC-certified cannot be used to meet RPS requirements. To ensure that only CEC-certified energy is procured under a Commission-approved RPS contract, the Commission has required standard and non-modifiable “eligibility” language in all RPS contracts. That language requires a seller to warrant that the project qualifies and is certified by the CEC as an “Eligible Renewable Energy Resource,” that the project’s output delivered to the buyer qualifies under the requirements of the California RPS, and that the seller uses commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.²¹

The Commission requires a standard and non-modifiable clause in all RPS contracts that requires “CPUC Approval” of a PPA to include an explicit finding that “any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (*Public Utilities Code Section 399.11 et seq.*), Decision 03-06-071, or other applicable law.”²²

Notwithstanding this language, the Commission has no jurisdiction to determine whether a project is an eligible renewable energy resource, neither can the Commission determine prior to final CEC certification of a project, that “any procurement” pursuant to a specific contract will be “procurement from an eligible renewable energy resource.”

Therefore, while we include the required finding here, this finding has never been intended, and shall not be read now, to allow the generation from a non-RPS-eligible resource to count towards an RPS compliance obligation. Nor shall such finding absolve the seller of its obligation to obtain CEC certification, or the utility of its obligation to pursue remedies for breach of contract. Such contract

²¹ D.08-04-009 at Appendix A, under the “Eligibility” section.

²² See, e.g. D.08-04-009 at Appendix A, STC 1, CPUC Approval.

enforcement activities shall be reviewed pursuant to the Commission's authority to review the utilities' administration of contracts.

Confidential Information

The Commission, in implementing Pub. Util. Code § 454.5(g), has determined in D.06-06-066, as modified by D.07-05-032, that certain material submitted to the Commission as confidential should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations. D.06-06-066 adopted a time limit on the confidentiality of specific terms in RPS contracts. Such information, such as price, is confidential for three years from the date the contract states that energy deliveries begin, except contracts between IOUs and their affiliates, which are public.

The confidential appendices, marked "[REDACTED]" in the public copy of this resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments on January 2, 2015. No comments were received.

FINDINGS AND CONCLUSIONS

1. The Commission finds that generation from the CalRENEW-1 facility fits the portfolio need requirements of PG&E's RPS portfolio.
2. The Commission finds that the curtailment terms of CalRENEW-1 power purchase agreement, as amended by the fourth amendment, are reasonable and provide ratepayers increased benefits without increasing the cost of the original power purchase agreement.

3. The CalRENEW-1 power purchase agreement, as amended by the fourth amendment, includes the Commission adopted Renewable Portfolio Standard “non-modifiable” standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, D.10-03-021, as modified by D.11-01-025, and D.13-11-024.
4. Consistent with D.11-12-052, PG&E provided information in AL 4473-E regarding the expected portfolio content category classification of the renewable energy credits to be procured pursuant to the amended CalRENEW-1 power purchase agreement.
5. The CalRENEW-1 power purchase agreement, as amended by the fourth amendment, meets the conditions for emission performance standard compliance because it is for intermittent generation with a capacity factor of less than 60 percent.
6. Consistent with D.06-05-039, an independent evaluator oversaw PG&E’s renewable portfolio standard procurement process. Additionally, an independent evaluator oversaw PG&E’s negotiations with CalRENEW-1.
7. The confidential appendices, marked “[REDACTED]” in the public copy of this resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.
8. Payments made by Pacific Gas and Electric under the CalRENEW-1 power purchase agreement, as amended by the fourth amendment, are fully recoverable in rates over the life of the amended power purchase agreement, subject to Commission review of PG&E’s administration of the amended power purchase agreement.
9. AL 4473-E should be approved effective today without modification.

THEREFORE IT IS ORDERED THAT:

1. Pacific Gas & Electric Company’s Advice Letter 4473-E, requesting Commission review and approval of a renewable power purchase agreement, with CalRENEW-1 LLC as amended by the fourth amendment, is approved without modification.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on January 15, 2015; the following Commissioners voting favorably thereon:

TIM SULLIVAN
Executive Director

Confidential Appendix A

Evaluation Summary of the CalRENEW-1 PPA

[Redacted]

Confidential Appendix B

Independent Evaluation Summary of the CalRENEW-1 PPA

[Redacted]

Confidential Appendix C

Major Contract Revisions of the CalRENEW-1 PPA
(Revisions highlighted in bold font)

[Redacted]